

REMARKS

Claims 1-16 are pending in the application. The specification has been amended by the present amendment.

In the April 10, 2003 Office Action, the drawings were objected to under 37 C.F.R. 1.84 or 1.152 and claims 1-16 were rejected under 35 U.S.C. §103(a) as being unpatentable over Nagami et al (U.S. Patent No. 6,343,322).

In response to the objection to the drawings, formal drawings have been filed with the present amendment.

The specification has been amended to clarify the invention. Support for the amendment is provided at least at page 6, lines 3-7. Therefore, the amendment raises no question of new matter.

Rejections under 35 U.S.C. §103

Claims 1-16 were rejected under 35 U.S.C. §102(e) as being anticipated by Nagami et al. Applicants respectfully traverse.

Nagami et al discloses a packet transfer scheme for transferring packets at a boundary of a plurality of networks.¹ In particular, Nagami et al discloses a network layer control unit 207 connected to a network layer switch unit 204; the network layer switch unit 204 connected to a datalink layer-network layer translation unit 203; and the datalink layer-network layer translation unit 203 connected to a datalink layer switch unit 202.² In addition, Nagami et al discloses the datalink layer switch unit 202 is provided with a datalink layer routing table (L2 routing table) therein, that is managed by a datalink layer control unit 206.³ Further, Nagami et al discloses that the network layer switch unit 204 has an L3 routing table and a function similar to those of a conventional router, in which a destination address of an L3 packet is checked and compared with the L3 routing table to determine an output network I/F.⁴ Furthermore, Nagami et al discloses the network layer control unit 207 has a function for managing the L3 routing table provided in the network layer switch unit 204.⁵ Moreover, Nagami et al discloses the network

¹Nagami et al at Abstract.

²*Id.* at Fig. 4, column 8, lines 54-67.

³*Id.* at Fig. 4, column 9, lines 16-23.

⁴*Id.* at Fig. 4, ref. 204; column 9, lines 33-37.

⁵*Id.* at Fig. 4, ref. 207; column 9, lines 65-66.

layer control unit 207 manages the L3 routing table using existing routing protocols such as Opens Shortest Path First (OSPF).⁶

However, regarding independent claims 1 and 11, Nagami et al nowhere discloses, as recited in claims 1 and 11:

performing logical bridging of data frames destined for or originating from said control point in a network processor directly connected to said control point (emphasis added).

That is, Nagami et al nowhere discloses “performing logical bridging” in a *single* “network processor directly connected to said control point,” as recited in claims 1 and 11, and as shown in Fig. 2, at references 205 and 206 of the specification. In contrast to the claimed invention, Nagami et al discloses *a plurality of units* including the network layer unit 204, the datalink layer-network layer translation unit 203, and the datalink layer switch unit 202 are used to perform logical bridging functions.⁷ Thus, Nagami et al does not meet the limitation of “performing logical bridging” in a single network processor directly connected to the control point.

In addition, Nagami et al discloses only *one* unit, the network layer unit 204, of the plurality of units required to perform logical bridging functions is “directly connected to said control point,” as recited in claims 1 and 11.⁸ In particular, the Office Action indicates the network layer control unit 207 of Nagami et al as analogous to the control point 206 of the claimed invention.⁹ In contrast to the “network processor” of the claimed invention, Fig. 4 of Nagami et al clearly shows that *only* the network layer switch unit 204 is *directly connected* to the network layer control unit 207. Thus, Nagami et al does not meet the limitation of “performing logical bridging” in a single network processor directly connected to the control point.

Further, Nagami et al discloses the network switch unit 202, which *is not directly connected* to the network layer control unit 207 and contains the L2 table.¹⁰ In contrast to Nagami et al, claims 1 and 11 recite “a network processor directly connected to the control point,” where the network processor 205 *is directly connected* to the control point 206 and contains the L2 table, as shown in Figure 2 of the specification. Thus, Nagami et al does not

⁶ *Id.* at Fig. 4, ref. 207; column 9, line 65 to column 10, line 7.

⁷ *Id.* at Fig. 4, refs. 202-206; column 9, line 1 to column 10, line 7.

⁸ *Id.* at Fig. 4, column 8, lines 54-67.

⁹ Outstanding Office Action at page 1, paragraph 4, lines 5-6.

¹⁰ See. Nagami et al at Fig. 4, ref. 202, column 9, lines 16-23.

meet the limitation of “performing logical bridging” in a single network processor directly connected to the control point.

Moreover, a goal of the claimed invention is to off-load processing tasks such as OSPF from the control point 206.¹¹ In contrast to the claimed invention Nagami et al discloses the network layer control unit 207 manages the L3 routing table using existing routing protocols such as OSPF.¹² Thus, Nagami et al teaches away from the claimed invention.

Therefore, it is respectfully submitted that Nagami et al nowhere discloses, suggests or makes obvious the limitations of claims 1 and 11 and that claims 1 and 11, and claims dependent thereon, patentably distinguish thereover.

In addition, regarding independent claim 7, Nagami et al nowhere discloses, as recited in claim 7:

said plurality of network processors programmed with logical bridging and routing functions;
wherein *a network processor directly connected to said control point* performs logical bridging functions needed by said control point (emphasis added).

That is, Nagami et al nowhere discloses that a *single* “network processor directly connected to said control point performs logical bridging functions needed by said control point,” as recited in claim 7, and as shown in Fig. 2, at references 204, 208-210 of the specification. In contrast to the claimed invention, Nagami et al discloses *a plurality of units* including the network layer unit 204, the datalink layer-network 204, the datalink layer-network layer translation unit 203, and the datalink layer switch unit 202 are used to perform logical bridging functions.¹³ Thus, Nagami et al does not meet the limitation that “a network processor directly connected to said control point performs logical bridging functions needed by said control point,” as recited in claim 7.

In addition, Nagami et al discloses only *one* unit, the network layer unit 204, of the plurality of units required to perform logical bridging functions is “directly connected to said control point,” as recited in claim 7.¹⁴ In particular, the Office Action indicates the network layer control unit 207 as analogous to the control point 206 of the claimed invention.¹⁵ In contrast to the “network processor” of the claimed invention, Fig. 4 of Nagami et al clearly shows that *only*

¹¹ Specification at page 3, lines 5-12, and page 4, line 11 to page 5, line 1.

¹² *Id.* at Fig. 4, refs. 202-206; column 9, line 65 to column 10, line 7.

¹³ *Id.* at Fig. 4, refs. 202-206, column 9, line 1 to column 10, line 7.

¹⁴ *Id.* at Fig. 4, column 8, lines 54-67.

¹⁵ Outstanding Office Action at page 1, paragraph 4, lines 5-6.

the network layer switch unit 204 is *directly connected* to the network layer control unit 207. Thus, Nagami et al does not meet the limitation that “a network processor directly connected to said control point performs logical bridging functions needed by said control point,” as recited in claim 7.

Further, Nagami et al discloses the network switch unit 202, which *is not directly connected* to the network layer control unit 207 and contains the L2 table.¹⁶ In contrast to Nagami et al, claim 7 recites “a network processor directly connected to the control point,” where the network processor 205 *is directly connected* to the control point 206 and contains the L2 table, as shown in Figure 2 of the specification. Thus, Nagami et al does not meet the limitation that “a network processor directly connected to said control point performs logical bridging functions needed by said control point,” as recited in claim 7.

Moreover, a goal of the claimed invention is to off-load processing tasks such as OSPF from the control point 206.¹⁷ In contrast to the claimed invention Nagami et al discloses the network layer control unit 207 manages the L3 routing table using existing routing protocols such as OSPF.¹⁸ Thus, Nagami et al teaches away from the claimed invention.

Therefore, it is respectfully submitted that Nagami et al nowhere discloses, suggests or makes obvious the limitations of claim 7 and that claim 7, and claims dependent thereon, patentably distinguish thereover.

Conclusions

In view of the above, consideration and allowance are, therefore, respectfully solicited.

In the event the Examiner believes an interview might serve to advance the prosecution of this application in any way, the undersigned attorney is available at the telephone number noted below.

¹⁶ See. Nagami et al at Fig. 4, column 8, lines 54-67.

¹⁷ Specification at page 3, lines 5-12, page 4, line 11 to page 5, line 1.

¹⁸ *Id.* at Fig. 4, refs. 202-206; column 9, line 1 to column 10, line 7.